NEW GENUS AND SPECIES OF ACANTHOCORINI (HEMIPTERA: HETEROPTERA: COREIDAE: COREINAE) FROM AUSTRALIA[1]

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ABSTRACT: A new genus, *Postleniatus* and species, *P. glycosmisus,* collected in Australia, are described. The relationship with *Pomponatius* Distant and *Turrana* Distant is discussed. An illustration of the new species and figures of the hemelytra, male genital capsule, and female genital plates are provided. A key to the Australian Acanthocorini is provided.

KEY WORDS: Heteroptera, Coreidae, Acanthocorini, Australia, new genus, new species

Prior to this paper, two genera and three species of Acanthocorini have been recorded from Australia (Brailovsky and Monteith 1996, Cassis and Gross 2002). The genus *Pomponatius* Distant, 1904, contains two species, *P. luridus* Brailovsky and Monteith, 1996, and *P. typicus* Distant, 1904; *Turrana* Distant, 1911, includes one species *T. abnormis* Distant, 1911. This paper adds one new genus and species and provides eight morphological features to distinguish them from other Australian Acanthocorini: head and pronotum longer than wide, femora unarmed, abdomen in both sexes narrowed and expanded posteriorly, antennal segment II longer than III, eyes small, semiglobose, longitudinal groove of mesosternum deep, reaching posterior third, and abdominal segments VIII and IX of female short. A key to the known genera and species of Acanthocorini of Australia is given.

Postleniatus, NEW GENUS

Type Species. *Postleniatus glycosmisus* Brailovsky sp. nov.

Description. *Male. General habitus* (Fig. 9). *Head* longer than wide across eyes, subquadrate, not produced beyond antenniferous tubercles, granulate, and dorsally flat; tylus medially upturned to form a small horn, and apically rounded; juga unarmed, thick, globose, shorter than tylus; inner margins of antenniferous tubercles with large lobe apically rounded and widely separated; antennal segment I robust, thickest, longer than head; segment II cylindrical, regularly incrassate; segment III cylindrical, slender, IV fusiform; antennal segment IV shortest, segment I longest, II longer than III; frons with deep median longitudinal sulcus; ocelli almost sessile; preocellar pit small, deep; eyes moderately large, semiglobose; postocular tubercle absent; bucculae unarmed, short, rounded, not extending beyond anterior margin of eyes; rostrum reaching posterior margin of mesosternum; rostral segment III shortest, segment IV longest, II longer than I. *Thorax:* pronotum rectangular, longer than wide, flat, weakly declivent; collar not clearly marked; frontal angles produced forward as small conical projection; anterior margin concave; anterolateral margins straight, slightly reflected; humeral angles obtuse, apex subacute; posterolateral margins straight, smooth; posterior margin concave, smooth; anterior lobes of pronotal disk granulate, with few punctures, posterior

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lobes densely punctate, each puncture medium-sized and scarcely deep; calli flat, separated along midline by longitudinal furrow; anterior lobe of metathoracic peritreme elevated, reniform, posterior lobe sharp, small; mesosternum with median longitudinal groove, reaching posterior third; pro-, meso-, and metathoraces granulate with few scattered punctures. *Legs:* short; hind femur not extending beyond posterior border of abdominal sternite IV; femora unarmed, gradually clavate, densely granulate; tibiae terete, conspicuously sulcate. *Scutellum:* triangular, longer than wide, flat, finely striate; apex subacute. *Hemelytra:* macropterous, reaching anterior margin of abdominal segment VII; costal margin emarginate; apical margin weakly sinuate; apical angle obtuse; clavus and corium strong and deeply punctate (Fig. 8). *Abdomen:* narrow, slightly expanded posteriorly; abdominal segment VII exposed aterally with posterior margin trilobate, median lobe fairly rounded, lateral expansions subtriangular (Fig. 9); connexivum raised above terga; posterior angle of each connexival segment entire, not expanded into spine; abdominal sterna without medial furrow. *Male genitalia.* Genital capsule: posteroventral edge elongate, projected as broad large-sized triangular lobe, apically subtruncated (Figs. 5-6). *Female genitalia:* abdomen narrow, expanded posteriorly; abdominal sternite VII with plica and fissura; plica rectangular, short, reaching anterior third of sternite VII. Genital plate: gonocoxa I square, shorter than paratergite IX, in caudal view closed, in lateral view convex; paratergite VIII triangular, elongate, with spiracle visible; paratergite IX triangular, elongate, larger than paratergite VIII and apically acute.

Discussion. The new genus is closely allied to *Turrana* Distant (1911) in having the head and pronotum longer than wide, postocular tubercle absent, posterior margin of pronotal disk concave, legs short with hind femur reaching anterior or middle third of abdominal sternite IV, ocelli not raised, femora unarmed, and clavus and corium strong and deeply punctate.

In *Postleniatus,* the abdomen in both sexes is narrowed and slightly expanded posteriorly (Fig. 9), antennal segment II longer than III, eyes moderately large, rostrum reaching posterior margin of mesosternum, longitudinal groove of mesosternum deep, reaching posterior third, and abdominal segments VIII and IX of female short. In *Turrana* the abdomen in both sexes are gradually narrowing beyond middle (Figs. 1, 3), antennal segment III longer than II, eyes small, compressed, rostrum shorter reaching posterior margin of prosternum, longitudinal groove of mesosternum not reaching posterior third, and abdominal segments VIII and IX of female elongate, tubular-type (Fig. 1).

In *Pomponatius* Distant (1904), the other australian genus included in Acanthocorini, the head and pronotum are wider than long, femora ventrally armed, postocular tubercle present, clavus and corium dense and finely punctate, each puncture small, never deeply excavated, hemelytral membrane shorter (Fig. 7), hind femur reaching anterior or middle third of abdominal sternite V, male abdominal segment VII with posterior margin not trilobate (Fig. 2), and female genitalia elongate (Fig. 4).

Etymology. Named after Anthony Postle, distinguished Australian entomologist. Gender masculine.

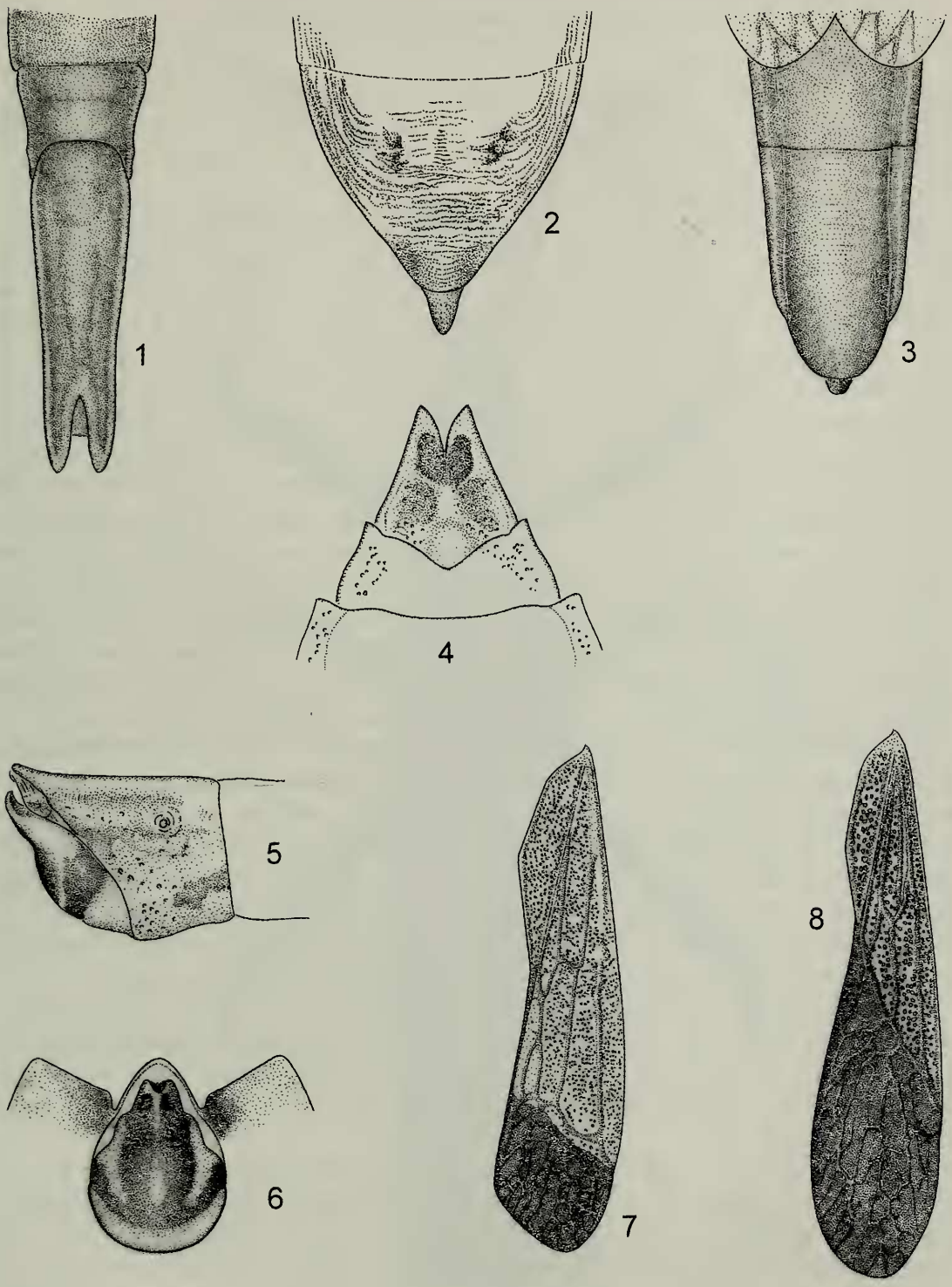

Fig. 1. *Turrana abnormis* Distant. Dorsal view of female abdominal segments VII to IX. Figs. 2-3. Dorsal view of male abdominal segment VII, and apex of genital capsule. Fig. 2. *Pomponatius typicus* Distant. Fig. 3. *Turrana abnormis* Distant. Fig. 4. *Pomponatius typicus* Distant. Dorsal view of female abdominal segments VII to IX. Figs. 5-6. Male genital capsule of *Pomponatius glycosmisus* NEW SPECIES. Fig. 5. Lateral view. Fig. 6. Caudal view. Figs. 7-8. Hemelytra. Fig. 7. *Pomponatius typicus* Distant. Fig. 8. *Postleniatus glycosmisus* NEW SPECIES.

Postleniatus glycosmisus, NEW SPECIES

(Figs. 5, 6, 8, 9)

Types. Holotype: male: Western Australia. Glycosmis Bay, 9 March 2004, A. Postle; deposited: Queensland Museum, Brisbane (QMBA). *Paratype:* female: Western Australia. Glycosmis Bay, 9 March 2004, A. Postle; deposited: Queensland Museum, Brisbane (QMBA).

Description. Dorsal color: yellowish dark, suffused with pink and dark irregular marks. *Head:* yellowish dark with outer face of antenniferous tubercles, widened longitudinal stripe running between inner face of antenniferous tubercles until vertex, and postocular space dark brown; antennal segment I pale reddish brown suffused with yellowish dark marks; antennal segment II reddish brown with inner face at basal third pale yellow; segment III pale yellow with apical third reddish brown, and IV with basal half pale orange and apical half reddish brown. *Pronotum:* yellowish dark, suffused with pink irregular marks, and punctures dark brown; humeral angles almost black. *Scutellum* yellow with lateral margins pale brown. Hemelytra: clavus and corium yellowish dark, suffused with pink irregular marks, and punctures dark brown; hemelytral membrane pale brown with veins darker. *Abdomen:* connexival segments III to VII black with anterior third pale yellow; abdominal terga II to VI shiny orange yellow, and VII yellow with two dark brown longitudinal stripes running laterally to midline. Ventral color: pale yellow suffused with pink irregular marks on head and thorax, and with following areas black: longitudinal stripe on meso- and metasterna, upper margin of metaacetabulae, the area adjacent to metathoracic peritreme, posterior third of pleural margins of abdominal sterna, rim of abdominal spiracle, irregular spots on abdominal sterna, and much of genital capsule; upper margin of abdomen almost entirely dark yellow. *Legs:* coxae reddish brown with ventral surface castaneus to shiny orange; trochanters reddish brown to dark brown; femora with dorsal surface reddish brown to dark brown suffused with yellowish dark marks, ventral surface pale yellowish with dark brown spots and irregular stripes dark brown to black; tibiae dark yellow with basal joint dark brown; tarsi dark yellow with orange marks.

Measurements. Male: head length 1.44 mm; width across eyes 1.38 mm; interocular space 0.86 mm; interocellar distance 0.42 mm; antennal segment length I, 2.64, II, 2.30, III, 2.24, IV, 1.18 mm; pronotum length 2.54 mm; width across humeral angles 2.26 mm; scutellar length 1.04 mm; width 0.76 mm; total body length 13.68 mm.

Female. Similar to male holotype except antennal segment II reddish brown with basal third dark yellow, fore tibiae yellow suffused with pale brown marks, middle and hind tibiae pale yellow with basal joint dark brown; connexival segment VII black with anterior third, wide obliquely stripe at middle third, and posterior border yellow, connexival segments VIII and IX black with dorsal third yellow, and genital plates yellow.

Measurements. Female: head length 1.60 mm; width across eyes 1.56 mm; interocular distance 0.98 mm; interocellar distance 0.46 mm; antennal segment length I, 3.06, II, 2.64, III, 2.52, IV, 1.26 mm; pronotum length 3.12 mm; width across humeral angles 2.80 mm; scutellar length 1.36 mm; width 1.08 mm; total body length 17.62 mm.

Etymology. Named for Glycosmis Bay, the type locality.

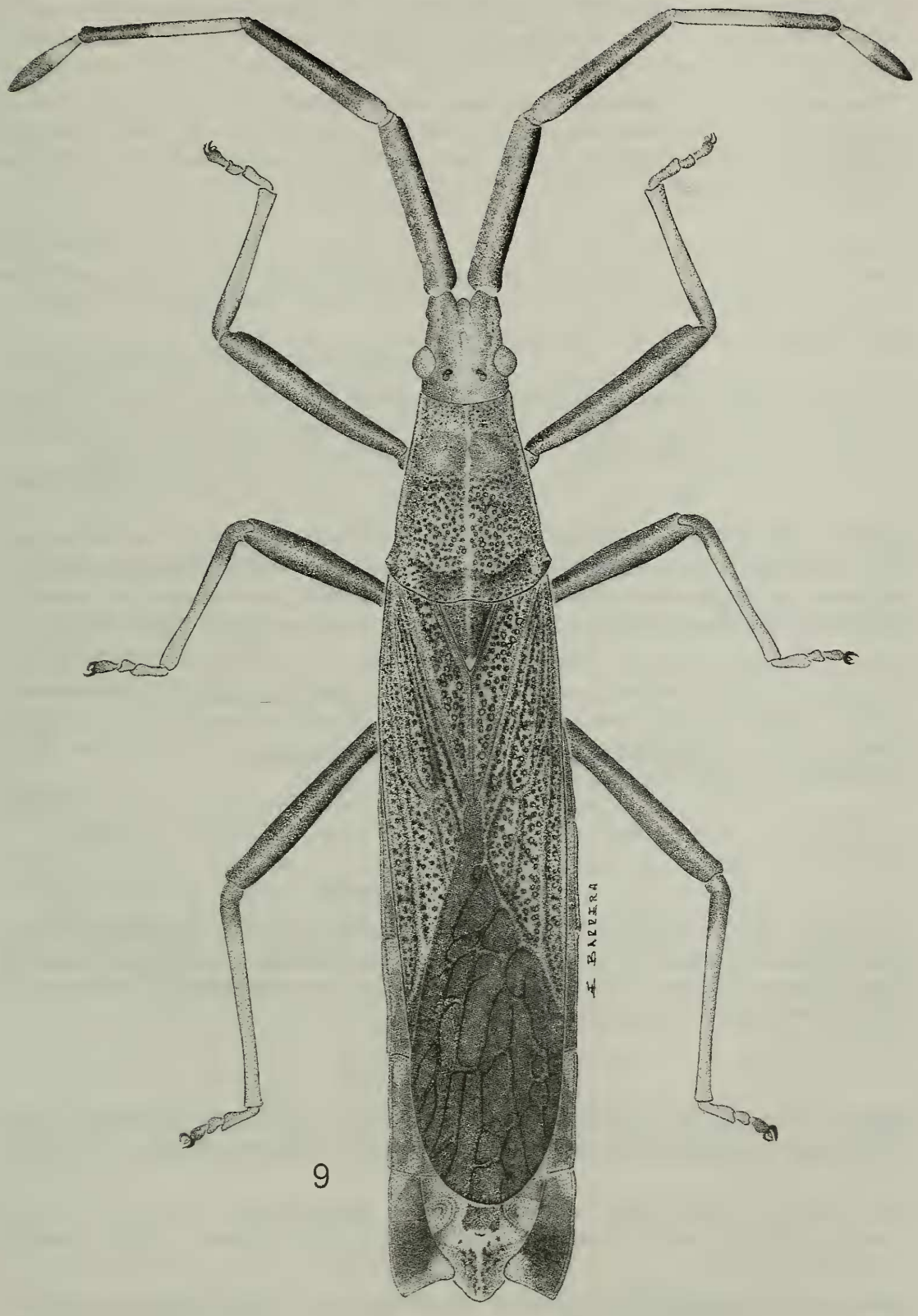

Fig. 9. Dorsal view of *Postleniatus glycosmisus* NEW SPECIES (male).

Key to the known Australian Acanthocorini

1. Head and pronotum longer than wide; legs short; hind femora reaching middle third of abdominal sternite IV; clavus and corium strong and deeply punctate, each puncture deeply excavated, and large (Fig. 8); femora unarmed; postocular tubercle absent.....3

   Head and pronotum wider than long; legs longer; hind femora reaching anterior or middle third of abdominal sternite V; clavus and corium dense and finely punctate, each puncture small and never deeply excavated (Fig. 7); femora ventrally armed; postocular tubercle present.....2

2. Antennal segment III not noticeably more swollen than II, bicoloured, with apical half paler than basal half; hemelytral membrane elongate, longer than 3.20 mm, with several longitudinal veins, with basal margin strongly sinuate; dark longitudinal stripes on prosternum about same width as rostrum.....
   .....*Pomponatius luridus* Brailovsky and Monteith

   Antennal segment III noticeably more swollen than II not bicoloured; hemelytral membrane short, less than 3.20 mm, with reticulate venation, basal margin uniformly curved; dark longitudinal stripes on prosternum at least twice width of rostrum .....
   .....*Pomponatius typicus* Distant

3. Abdomen in both sexes gradually narrowing beyond middle (Fig. 3); antennal segment III longer than II; eyes small, compressed; rostrum short, reaching posterior border of prosternum; longitudinal groove of mesosternum short, not reaching the posterior third; abdominal segments VIII and IX of female elongate, tubular-type (Fig. 1).....
   .....*Turrana abnormis* Distant

   Abdomen in both sexes narrowed, slightly expanded posteriorly (Fig. 9); antennal segment II longer than III; eyes moderately large; rostrum reaching posterior margin of mesosternum; longitudinal groove of mesosternum deep, reaching posterior third; abdominal segments VIII and IX of female short .....
   .....*Postleniatus glycosmisus* NEW GENUS, NEW SPECIES

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LITERATURE CITED

Brailovsky, H. and G. B. Monteith. 1996. A new species of *Pomponatius* Distant from Australia (Hemiptera: Heteroptera: Coreidae: Acanthocorini). Memoirs of the Queensland Museum 39(2): 205-210.

Cassis, G. and G. F. Gross. 2002. Hemiptera: Heteroptera (Pentatomorpha) *In,* Houston W.W. K. and Wells A. (Editors). Zoological Catalogue of Australia. Vol. 27.3B. Melbourne: CSIRO Publishing, Australia xiv 737 pp.

Distant, W. L. 1904. Rhynchotal notes 22. Heteroptera from north Queensland. Annals and Magazine of Natural History. Series (7) 13: 263-276.

Distant, W. L. 1911. Rhynchotal notes 55. Annals and Magazine of Natural History. Series (8) 7: 576-586.